§ 153.310

CARGO HANDLING SPACE VENTILATION

§ 153.310 Ventilation system type.

A cargo handling space must have a permanent forced ventilation system of the exhaust type.

§ 153.312 Ventilation system standards.

A cargo handling space ventilation system must meet the following:

- (a) A ventilation system exhaust duct must discharge no less than 10 m (approx. 32.8 ft) from openings into or ventilation intakes for, accommodation or service spaces.
- (b) A ventilation system must not recycle vapors from ventilation discharges.
- (c) Except for the space served by the ventilation duct, a ventilation duct must not pass through a machinery room, an accommodation space, or working spaces.
- (d) A ventilation system must be operable from outside the space it ventilates.
- (e) A ventilation system must be sized to change the air in the ventilated space at least 30 times per hour.
- (f) A ventilation system must not allow air to stagnate in any part of a ventilated space.
- (g) A ventilation system must be able to exhaust air from both above and below the deck plates of a ventilated space.

§ 153.314 Ventilation of spaces not usually occupied.

- (a) Each tankship must have portable ventilation equipment that fits the mount required in paragraph (b)(1) of this section.
- (b) Each enclosed space within the cargo area that does not have a permanent ventilation system meeting §153.312 must have:
- (1) A mount for the portable mechanical ventilation equipment required by this section; and
- (2) Either permanent ventilation ductwork connected to the mount and arranged to supply air to the extremities of the space; or
- (3) An attachment for temporary ductwork at the mount with enough ductway in the ventilated space and temporary ductwork stowed aboard the

vessel to supply air to the extremities of the space.

[CGD 73-96, 42 FR 49027, Sept. 26, 1977, as amended by CGD 78-128, 47 FR 21208, May 17, 1982]

§ 153.316 Special cargo pumproom ventilation rate.

When Table 1 refers to this section, the cargo pumproom ventilation system must change the air in the cargo pumproom 45 times per hour and discharge no less than 4 m (approx. 13.1 ft) above the deck.

CARGO PUMPROOMS

§ 153.330 Access.

- (a) The access door to a cargo pumproom must open on the weatheredeck.
- (b) The access way to a cargo pumproom and its valving must allow passage of a man wearing the breathing apparatus required by §153.214(b)(1).
- (c) Each ladderway in a cargo pumproom must be free from obstructions by piping, framework, or other equipment.
- (d) Cargo pumproom ladders and platforms must have guard railings.
- (e) Each ladder to a cargo pump-room must have an incline from the horizontal of less than 60°

§ 153.332 Hoisting arrangement.

- (a) A cargo pumproom located below the weatherdeck must have a permanent hoisting arrangement with a lifting capacity of 2500 N (approx. 562 lbs), operable from the weatherdeck, for the removal of an unconscious person.
- (b) The cargo pumproom must have a 60 cm by 60 cm (approx. 2 ft by 2 ft) cross-sectional clearance through the hoistway.

§ 153.333 Cargo pump discharge pressure gauge.

Each cargo pump within a pumproom must have a discharge pressure gauge outside the pumproom.

§ 153.334 Bilge pumping systems.

- (a) A cargo pumproom must have a bilge pumping system.
- (b) The bilge pumping system must have:
- (1) Complete remote operating controls outside the cargo pumproom; and

(2) An alarm that operates when the depth of liquid in the bilges exceeds 50 cm (approx. 19.7 in.).

§ 153.336 Special cargo pump or pumproom requirements.

- (a) When Table 1 refers to this section:
- (1) The cargo pump must be an intank cargo pump;
- (2) The cargo pumproom must be on or above the weatherdeck; or
- (3) The cargo pumproom must have the specific approval of the Commandant (G-MSO).
- (b) For a cargo pumproom described in paragraph (a)(2) or (a)(3) the tankship must:
- (1) Have a low pressure breathing quality air supply system for use with the breathing apparatus in the pumproom; or
- (2) Meet any requirements specified by the Commandant (G-MSO).
- (c) A low pressure air supply system described in paragraph (b)(1) of this section must:
- (1) Run from fixed air bottles to the pumproom;
- (2) Have an air compressor to recharge the fixed air bottles;
- (3) have hose connections in the pumproom suitable for use with the breathing apparatus required in §153.214(b)(1); and
- (4) have the air capacity to enable two men to work in the pumproom for at least one hour each without using the cartridges for the breathing apparatus required in §153.214(b)(1).

[CGD 78-128, 47 FR 21208, May 17, 1982, as amended by CGD 82-063b, 48 FR 4781, Feb. 3, 1983]

CARGO VENTING SYSTEMS

\$153.350 Location of B/3 vent discharges.

Except as prescribed in §153.353, a B/3 venting system must discharge:

- (a) At the highest of the following points:
- (1) 6m (approx. 19.7 ft) above the weatherdeck.
 - (2) B/3 above the weatherdeck.
- (3) 6m (approx. 19.7 ft) above a walkway, if the walkway is within a 6m (approx. 19.7 ft) horizontal radius from the vent discharge.

(b) At least 15m (approx. 49.2 ft) from air intakes for, or openings into, accommodation and service spaces.

[CGD 78-128, 47 FR 21208, May 17, 1982; 47 FR 27293, June 24, 1982]

§153.351 Location of 4m vent discharges.

Except as prescribed in §153.353, a 4m venting system must discharge:

- (a) At least 4m (approx. 13.1 ft) above the higher of:
 - (1) the weatherdeck; or
- (2) any walkway that is within a 4m (approx. 13.1 ft) horizontal radius from the vent discharge.
- (b) At least 10m (approx. 32.8 ft) from air intakes for, or openings into, accommodation or service spaces.

[CGD 78-128, 47 FR 21208, May 17, 1982]

§ 153.352 B/3 and 4 m venting system outlets.

- A B/3 or 4 m venting system outlet must:
- (a) Discharge vertically upwards; and
- (b) Prevent precipitation from entering the vent system.

§ 153.353 High velocity vents.

The discharge point of a B/3 or 4m venting system must be located at least 3m (approx. 10 ft) above the weatherdeck or walkway if:

- (a) The discharge is a vertical, unimpeded jet;
- (b) The jet has a minimum exit velocity of 30 m/sec (approx. 98.4 ft/sec); and
- (c) The high velocity vent has been approved by Commandant (G-MSO).

[CGD 78-128, 47 FR 21208, May 17, 1982, as amended by CGD 82-063b, 48 FR 4782, Feb. 3, 1983]

§153.354 Venting system inlet.

A venting system must terminate in the vapor space above the cargo when the tank is filled to a 2 percent ullage and the tankship has no heel or trim.

§153.355 PV venting systems.

When Table 1 requires a PV venting system, the cargo tank must have a PV valve in its vent line. The PV valve must be located between the tank and any connection to another tank's vent line (such as a vent riser common to two or more tanks).